adjustment without compromising efficacy. Drug interaction complexity with new agents and lack of pediatric data highlights a need for collaboration between HSCT units.

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RETROSPECTIVE ANALYSIS OF WEEKLY INTRAVENOUS IMMUNOGLOBULIN PROPHYLAXIS VERSUS INTRAVENOUS IMMUNOGLOBULIN BY IGG LEVEL MONITORING IN HEMATOPOIETIC STEM CELL TRANSPLANT RECIPIENTS

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Background: Patients undergoing hematopoietic stem cell transplant (HSCT) may have a higher incidence of infections due to secondary hypogammaglobulinemia. A recent meta-analysis evaluated intravenous immune globulin (IVIG) in a prophylactic setting and concluded routine use had no benefit in survival or infection prevention in HSCT. The study suggested monitoring of IgG levels and replacing with IVIG in high risk patients.
Methods: All allogeneic HSCT patients who received prophylactic IVIG 0.2 gm/kg IV once weekly (n = 115) from admission to day +90 were compared to patients who received IVIG based on low IgG levels (n = 114) between 1/09 and 8/09. The IgG levels were drawn upon admission, day +30, day +60, and day +90. Utilization of IVIG, incidence of veno-occulsive disease (VOD), graft versus host disease (GVHD), and documented infections were recorded during the first 100 days after transplant.
Results: The weekly control group (n = 115) had a median age of 49 compared to 54 years in the IVIG by level group (n = 114). No significant difference in type of transplant, except a higher number of matched un-related donors (MUD) in the by level group (62 vs 41, p = 0.01). There were no significant differences in occurrence of GVHD (55 vs 50), VOD (2 vs 0), or in infections such as RSV (3 vs 1), VZV (1 vs 0), HSV (3 vs 8), Adenovirus (2 vs 1), polyoma/BK virus (18 vs 26), bacterial infection (49 vs 38), or fungal infection (12 vs 7) in weekly versus by IgG levels respectively. A higher incidence of para-influenza occurred in the weekly group (9 vs 0, p = 0.003) correlating with flu season. IVIG cost in the weekly control group totaled AWP $924,408 vs $252,547, with overall savings of $671,816 in the IVIG by level group.
Conclusion: With no difference in major complications, rate of infection, and a significant savings in IVIG use, a change in institutional practice was implemented. IgG levels are now monitored monthly and replacement is done based on low IgG level.

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RETROSPECTIVE ANALYSIS OF THE INCIDENCE OF SYMPTOMATIC VENOUS THROMBOEMBOLISM AMONG PATIENTS WITH HEMATOLOGIC MALIGNANCY

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A growing body of evidence shows similar or increased venous thromboembolism (VTE) risk in specific hematologic malignancies, but few recommendations for VTE prophylaxis in hematologic malignancy exist. This study will investigate the incidence and trends of VTE among hematologic malignancy patients to identify patients at higher risk of VTE.
Methods: Clinical data was collected retrospectively from 200 admissions to Methodist University Hospital from December 2008 to October 2009 with primary or secondary diagnoses of hematologic malignancy. The primary objective is the incidence of symptomatic VTE. Secondary objectives include rate of appropriate VTE prophylaxis, risk of VTE in patients receiving VTE prophylaxis, subgroup analyses to determine populations at higher risk for VTE, length of stay with occurrence of symptomatic VTE, incidence of VTE surrounding implementation of hospital-wide VTE prophylaxis protocol, and all-cause mortality versus possible VTE-associated deaths.
Results: A total of 144 patients were represented in 200 admissions included in this study. The most common diagnoses included were non-Hodgkin's lymphoma (NHL, 24.3%), multiple myeloma (MM, 24.3%), and acute myelocytic leukemia (AML, 18.1%), and a majority of patients were African American. In April 2009, an automated screening tool for VTE prophylaxis was implemented that both assesses VTE risk and bleeding risk and offers three elective therapy options for VTE prophylaxis. Admissions were stratified according to the implementation date (100 before, 100 after protocol). Twelve VTE events were observed across all 200 admissions (6%). Nine VTE occurred prior to the protocol and 3 occurred after the prophylaxis protocol, not statistically significant. NHL (13%), chronic myelocytic leukemia (CML, 12.5%), and Hodgkin's lymphoma (HL, 8.3%) had the highest rates of VTE. VTE prophylaxis use increased by 160% after implementation of the VTE prophylaxis protocol, (p = 0.003). Use of VTE prophylaxis was not associated with any decreased risk of VTE or length of stay.
Conclusion: Incidence of VTE among the local malignant hematology patient population is similar to previously reported data, with highest VTE rates found in those patients with NHL, CML, and HL. The apparent lack of efficacy of VTE prophylaxis in this study may reflect either inaccurate current definitions of adequate VTE prophylaxis or the practice of holding anticoagulants in the setting of thrombocytopenia.

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VANCOMYCIN-RESISTANT ENTEROCOCCUS FAECIUM SURVEILANCE AND INFECTION IN AUTOLOGOUS AND ALLOGENEIC TRANSPLANTATION

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Introduction: Colonization with Vancomycin-resistant Enterococcus Faecium(VRE) places patients at increased risk for VRE infection. Variable rates of colonization and infection have been reported for hematapoeticc stem cell transplantion recipients. Herein we reivew VRE colonization rates amongst 882 autologous and allogeniec HSCT recipients and assess for risk factors associated with the development of VRE infection.

Methods: Medical records for 822 consecutive HSCT recipient inpatient admissions between 8/2004 to 8/2008 were reviewed for data. Pharmacy records were utilized to obtain data for medication. All patients were screened for VRE upon admission and weekly thereafter. All patients received acyclovir, azole antifungals and ciprofloxacin as prophylaxis. Positive VRE BAL cultures were excluded from infection analysis. Chi-square analysis was used for statistical analysis. This study was approved by NMH IRB.

Results: For 822 HSCT recipients reviewed (207 allogeneic and 615 autologous), new colonization developed in 136 patients (17%), while 41 patients were VRE colonized prior to admission. Overall 28 patients (3.4%) developed VRE infection (urine = 11, blood = 17, multiple = 3. No correlation was observed between age, sex, or administration of a neutropenic diet and VRE colonization or infection. Allogeneic transplant(p = .013), especially melphalan based RIST was associated with increased VRE infection (p = .011). Co-infection wth *Strept Viridans* occurred more frequently in VRE infected patients(p = .0001). Prior VRE colonization occurred in 15/28 patients (54%) who developed VRE infection compared to 13/651 who did not.(p = .0001). Median time to infection was 10days. A correlation between C.Diff infection and VRE colonization was identified(p = .0014). Almost all patients received wide spectrum *B-Lactam* antibiotics and vancomycin, which may explain the lack of correlation between these antibiotics and the development of VRE, however prior exposure to caspofungin was observed more frequently in patients with VRE infection(p = .0001). All treated patients received linezolid. Time to engraft was the same for auto and all patients, with or without VRE. Crude in-patient overall mortality was significantly higher in patients with VRE infections (p = .0002).
Conclusion: VRE colonization and infection increase morbidity and mortality post HSCT. Heightened awareness and correction